U N I V E R S I T Y *of* L O U I S V I L L E
Burns Research Group • Department of Chemistry • 2320 South Brook Street • Louisville, KY 40292
www.louisville.edu/chemistry/directory/faculty/christopher-t-burns • ctburn02@louisville.edu •
502.852.5977 (office) • 502.852.7840 (lab)

Burns Research Group SOP
Procedures for Quenching and Disposing of Drying Agents
Magnesium / Iodine used to dry Alcohols

Prepared by Suisheng (Steve) Shang

Scale: Mg 4 grams, I_2 0.4 grams for 400 mL isopropanol in a 500 mL RBF (Round Bottom Flask)

Step 1) In a fume hood, fasten the flask to a ring stand and remove vacuum/N_2 adapter from the round bottom flask or remove the Teflon plug if you are using a 500 mL vacuum transfer flask.

Step 2) Degrease all ground glass joints.

Step 3) Place an ice bath around the RBF and stirrer under the bath and RBF.

Step 4) Pour toluene (~100 mL) into RBF and stir for 30 minutes.

Step 5) Gradually add methanol (~50 mL) over several hours with stirring and then stir for 12 hours.

Step 6) After stirring for 12 hours, add 50 mL D.I. water dropwise over 3 hours and stir for 3 hours.

Step 7) Once it is clear that no further magnesium is present and reacting… Dispose of the quenched mixture into the nonhalogenated waste container.